FARMERS BRANCH

ORDINANCE NO. 3414

AN ORDINANCE OF THE CITY OF FARMERS BRANCH, TEXAS, AMENDING THE CODE OF ORDINANCES BY AMENDING CHAPTER 38 TITLED "FIRE PREVENTION AND PROTECTION" BY AMENDING ARTICLE II TITLED "FIRE CODE" TO ADOPT THE PROVISIONS OF THE 2015 EDITION OF THE INTERNATIONAL FIRE CODE WITH AMENDMENTS; PROVIDING A REPEALING CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY OF FINE NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS ($2,000.00) FOR EACH OFFENSE; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the International Code Council (ICC) has developed a set of comprehensive and coordinated national model construction codes (known generally as the "International Codes"); and

WHEREAS, the City of Farmers Branch has been involved throughout the development process of the International Codes, through participation with the North Texas Chapter of the International Code Council and through the regional review process by the Regional Codes Coordinating Committee of the North Central Texas Council of Governments (NCTCOG); and

WHEREAS, the creation of the 2015 editions of the International Codes by the ICC was in conjunction with the International Conference of Building Officials (ICBO), the organization whose codes the City of Farmers Branch has adopted since the 1970s; and

WHEREAS, the International Codes have been reviewed by the NCTCOG and City staff; and

WHEREAS, the City's building and construction codes are intended to be updated periodically, with the 2015 editions of the International Codes being the most current published building and construction codes for which local amendments have been developed; and

WHEREAS, the City Council of the City of Farmers Branch has determined that it is in the best interest of the citizens of the City of Farmers Branch to adopt the 2015 editions of the International Codes, as stated herein, as the minimum standards for the construction, use, occupancy and maintenance of buildings and structures within the City limits, as set forth herein, and to adopt local amendments to said codes in order to account for unique local practices and/or conditions relating to the design and construction of structures within the City;

SECTION 1. Chapter 38 titled "Fire Prevention and Protection" of the Code of Ordinances of the City of Farmers Branch, Texas, is amended by amending Article II titled "Fire Code" to read in its entirety as follows:

ARTICLE II. FIRE CODE

Sec. 38-36. Adoption of International Fire Code; purpose.

There is hereby adopted by the City of Farmers Branch, Texas for the purpose of establishing rules and regulations for the design, quality of materials, erection, construction, installation, alteration, repair, location, relocation, replacement, conversion, addition to, moving, removal, demolition, occupancy, equipment, use, height, area and maintenance of all building or structures, the 2015 International Fire Code, published by the International Code Council; with the exception of such sections thereof as are hereafter deleted, modified or amended by this Ordinance, and the same are hereby adopted and incorporated herein, the same as if entirely set out at length herein, and from the date of which this Ordinance shall take effect, the provisions hereof shall be controlling within the corporate limits of the City of Farmers Branch, Texas. This code shall be known as the "Fire Code" or the "Farmers Branch Fire Code".

Sec. 38-37 Definitions

The following words and phrases shall have the following meanings wherever they appear in the Fire Code:

(a) "Building Official" means the Building Official of the City of Farmers Branch, Texas.

(b) "Bureau of Fire Prevention" means the Fire Department of the City of Farmers Branch, Texas.

(c) "Chief of the Bureau of Fire Prevention" or word "Chief" mean the Fire Chief of the City of Farmers Branch, Texas or the Chief's authorized representative.

(d) "City" means the City of Farmers Branch, Texas.

(e) "Corporate counsel" means the City Attorney and any assistance city attorney for the City of Farmers Branch, Texas.

(f) "Fleet vehicle" means a motor vehicle which is one of a group of motor vehicles, owned or operated as a unit and used in the ongoing course of business.

(g) "Jurisdiction means the corporate limits of the City of Farmers Branch, Texas.

(h) "Police Chief" means the Chief of Police of the City of Farmers Branch, Texas.

Sec. 38-38 Local Amendments Adopted

For purposes of enforcement of the provisions of the Fire Code within the incorporated limits of the City, the following sections, paragraphs, and sentences of the 2015 Edition of the International Fire Code are hereby amended as follows:

Section 102.1 is amended by amending numbered paragraph 3 to read as follows:

3. Existing structures, facilities and conditions when required in Chapter 11 or in specific sections of this code.

Section 105.6 is amended to read as follows:

105.6 Required operational permits. The fire code official is authorized to issue operational permits for the operations set forth in sections 105.6.1 through 105.6.48. Operational permit fees are referenced in Appendix A-Fee Schedule, City of Farmers Branch Code of Ordinances.

Section 105.7 is amended to read as follows:

105.7 Required construction permits. The fire code official is authorized to issue construction permits for work as set forth in sections 105.7.1 through 105.7.19. Construction permit fees are referenced in Appendix A-Fee Schedule, City of Farmers Branch Code of Ordinances.

Section 105.7 is amended by adding Section 105.7.19 to read as follows:

105.7.19 Electronic access control systems. Construction permits are required for the installation or modification of an electronic access control system, as specified in Chapter 10. A separate construction permit is required for the installation or modification of a fire alarm system that may be connected to the access control system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

Section 108, including all of its subsections, is deleted.

Section 109.3.1 is amended to read as follows:

Section 109.3.1 Service. A notice of violation issued pursuant to this code shall be served upon the *owner,* the owner's authorized agent, operator, occupant, or other person responsible for the condition or violation, either by personal service, electronic mail, mail or by delivering the same to, and leaving it with, some person of responsibility upon the premises… {Remaining text unchanged}

Section 202 is amended by adding definitions for the phrases "DEFENDING IN PLACE," "SELF-SERVICE STORAGE FACILITY, "STANDYBY PERSONNEL," and "UPGRADED OR REPLACED FIRE ALARM SYSTEM" to read as follows:

DEFEND IN PLACE. A method of emergency response that engages building components and trained staff to provide occupant safety during an emergency. Emergency response involves remaining in place, relocating within the building, or both, without evacuating the building.

SELF-SERVICE STORAGE FACILITY. Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.

STANDBY PERSONNEL. Qualified fire service personnel, approved by the fire code official. When utilized, the number required shall be as directed by the fire code official. Charges for utilization shall be normally calculated by the jurisdiction.

UPGRADED OR REPLACED FIRE ALARM SYSTEM. A fire alarm system that is upgraded or replaced includes, but is not limited to the following:

1. Replacing a single board or fire alarm control unit component with a newer model
2. Installing a new fire alarm control unit in addition to or in place of an existing one
3. Conversion from a horn/strobe system to an emergency voice/alarm communication system
4. Conversion from a conventional system to one that utilizes addressable or analog devices.

The following are not considered an upgrade or replacement:

1. Firmware updates
2. Software updates
3. Replacing boards of the same model with chips utilizing the same or newer firmware

Section 202 is amended by amending the definitions of "AMBULATORY HEALTH CARE FACILITY," "ATRIUM," "FIRE WATCH," "FIREWORKS," "HIGH-PILED COMBUSTIBLE STORAGE," "HIGH RISE BUILDING," AND "REPAIR GARAGE" to read as follows:

AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing or similar care on a less than 24-hour basis to persons who are rendered incapable of self-preservation by the services provided. This group shall include but not be limited to the following:

- Dialysis center
- Procedures involving Sedation
- Sedation dentistry
- Surgery centers
- Colonic centers
- Psychiatric centers

ATRIUM. An opening connecting three or more stories....*{remaining text unchanged}*

FIRE WATCH. A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals or standby personnel when required by the fire code official, for the purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department.

FIREWORKS. Any composition or device for the purpose of producing a visible or an audible effect for entertainment purposes by combustion, deflagration, detonation, and/or activated by

ignition with a match or other heat producing device that meets the definition of 1.4G fireworks or 1.3G fireworks as set forth herein. *...{remainder of text unchanged}...*

HIGH-PILED COMBUSTIBLE STORAGE. Storage of combustible materials in closely packed piles or combustible materials on pallets, in racks or on shelves where the top of storage is greater than 12 feet in height. When required by the fire code official, high-piled combustible storage also includes certain high-hazard commodities, such as rubber tires, Group A plastics, flammable liquids, idle pallets and similar commodities, where the top of storage is greater than 6 feet in height. Any building classified as a group S Occupancy or speculative building exceeding 2,500 sq.ft. that has a clear height in excess of 14 feet, making it possible to be used for storage in excess of 12 feet, shall be considered to be high-piled storage. When a specific product cannot be identified, a fire protection system and life safety features shall be installed as for Class IV commodities, to the maximum pile height.

HIGH-RISE BUILDING. A building with an occupied floor located more than 55 feet (16,764 mm) above the lowest level of fire department vehicle access.

REPAIR GARAGE. A building, structure or portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification and servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement and other such minor repairs.

Section 307.1.1 is amended to read as follows:

Section 307.1.1 Prohibited open burning. Open burning that is offensive or objectionable because of smoke emissions, or when atmospheric conditions or local circumstances make such fires hazardous shall be prohibited.

Exception: *{No Change.}*

Section 307.2 is amended to read as follows:

Section 307.2 Permit required. A permit shall be obtained from the fire code official in accordance with Section 105.6 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, or open burning. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

Examples of state or local law, or regulations referenced elsewhere in this section may include but not be limited to the following:

1. Texas Commission on Environmental Quality guidelines and/or restrictions.
2. State, County or local temporary or permanent bans on open burning.
3. Local written policies as established by the fire code official.

Section 307.3 is amended to read as follows:

Section 307.3 Extinguishment authority. The fire code official is authorized to order the extinguishment by the permit holder, another person responsible or the fire department of open burning that creates or adds to a hazardous or objectionable situation.

Section 307.4 is amended to read as follows:

307.4 Location. The location for open burning shall not be less than 300 feet (91,440 mm) from any structure, and provisions shall be made to prevent the fire from spreading to within 300 feet (91,440 mm) of any structure.

{Exceptions unchanged}

Section 307.4.3 is amended by adding a new paragraph 2 under "Exceptions" to read as follows:

2. Where buildings, balconies and decks are protected by an approved automatic sprinkler system.

Section 307.4 is amended by adding Section 307.4.4 and Section 307.4.5 to read as follows:

307.4.4 Permanent outdoor fire pit. Permanently installed outdoor fire pits for recreational fire purposes shall not be installed within 10 feet of a structure or combustible material.

Exception: Permanently installed outdoor fireplaces constructed in accordance with the International Building Code.

307.4.5 Trench Burns. Trench burns shall be conducted in air curtain trenches and in accordance with Section 307.2.

307.5 is amended to read as follows:

307.5 Attendance. Open burning, trench burns, bonfires, recreational fires and use of portable outdoor fire places shall be constantly attended until the .... {Remainder of the section unchanged}.

Section 308.1.4 is amended to read as follows:

308.1.4 Open-flame cooking devices. Open-flame cooking devices, charcoal grills, and other similar devices used for cooking, shall not be located or used on combustible balconies, decks, or within 10 feet (3048 mm) of combustible construction.

Exceptions:

1. One- and two-family dwelling, except that LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20 pound (9.08 kg) LP-gas capacity] with an aggregate LP-gas capacity not to exceed 100 lbs. (5 containers).

2. Where buildings, balconies and decks are protected by an approved automatic sprinkler system, except that LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20 pound (9.08 kg) LP-gas capacity], with an aggregate LP-gas capacity not to exceed 40 lbs. (2 containers).

3. LP-gas cooking devices having LP-gas container with a water capacity not greater than 2 1/2 pounds [nominal 1 pound (0.454 kg) LP-gas capacity].

Section 308.1.6.2 is amended by amending Exception number 3 to read as follows:

3. Torches or flame-producing devices in accordance with Section 308.1.3.

Section 308.1.6.3 is amended to read as follows:

308.1.6.3 Sky Lanterns. A person shall not release or cause to be released an-unmanned free-floating devices containing an open flame or other heat source, such as but not limited to a sky lantern.

Section 311.5 is amended to read as follows:

311.5 Placards. The fire code official is authorized to require marking of any vacant or abandoned buildings or structures determined to be unsafe pursuant to Section 110 of this code relating to structural or interior hazards, as required by Section 311.5.1 through 311.5.5.

Section 403.5 is amended to read as follows:

403.5 Group E occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group E occupancies and for buildings containing both a Group E occupancy and an atrium. A diagram depicting two evacuation routes shall be posted in a conspicuous location in each classroom. Group E occupancies shall also comply with sections 403.5.1 through 403.5.3.

Section 404.2.2; by adding number 4.10 to read as follows:

4.10 Fire extinguishing system controls.

Section 405.4 is amended to read as follows:

405.4 Time. The fire code official may require an evacuation drill at any time. Drills shall be held at unexpected times and under varying conditions to simulate the unusual conditions that occur in case of fire.

Section 501.4 is amended to read as follows:

501.4 Timing of installation. When fire apparatus access roads or a water supply for fire protection is required to be installed for any structure or development, they shall be installed, tested, and approved prior to the time of which construction has progressed beyond completion of the foundation of any structure.

Section 503.1.1 is amended to read as follows:

503.1.1 Buildings and facilities. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45,720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility. Except for one-or two-family dwellings, the path of measurement shall be along a minimum of a ten feet (10') wide unobstructed pathway around the external walls of the structure.

Exception: {unchanged}

Section 503.2.1 is amended to read as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 24 feet (7315 mm), exclusive of shoulders, and an unobstructed vertical clearance of not less than 14 feet (4267 mm).

Section 503.2.3 is amended to read as follows:

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support the imposed loads of 80,000 lbs. for fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

Section 503.3 is amended to read as follows:

503.3 Marking. Striping, signs, or other markings, when approved by the fire code official, shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Striping, signs and other markings shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

(1) Striping – Fire apparatus access roads shall be continuously marked by painted lines of red traffic paint six inches (6") in width to show the boundaries of the lane. The words "FIRE LANE NO PARKING" shall appear in four inch (4") white letters at 15 feet intervals on the red border markings along both sides of the fire lanes. A 12-inch spacing is required between "FIRE LANE" and "NO PARKING". Where a curb is available, the stripping shall be on the vertical face of the curb.

(2) Signs – Signs shall read "FIRE LANE NO PARKING" and shall be 12" wide and 18" high. Signs shall be painted on a white background with letters and borders in red, using not less than 2" lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6' 6") above finished grade. Signs shall be spaced not more than fifty feet (50') apart along both sides of the fire lane. Signs may be installed on permanent buildings or walls or as approved by the fire code official.

Section 503.4 is amended to read as follows:

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 and any area marked as a fire lane as described in Section 503.3 shall be maintained at all times.

Section 505.1 is amended to read as follows:

505.1 Address identification. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numerals. Numbers shall be a minimum of 12 inches (304 mm) high with a minimum stroke width of 2 inches (50 mm). Suite numbers shall be a minimum of 6 inches (154 mm) high with a minimum stroke width of 1 inch (25mm) and numbers on rear-entry doors shall be a minimum of 3 inches (76 mm) high with a minimum stroke of 0.5 inch (12.7 mm). Obsolete address numbers shall be removed as directed by the code official.

Sections 507.5.1 and 507.5.1.1 are amended to read as follows:

507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 300 feet (91 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

507.5.1.1 Hydrant for sprinkler and standpipe systems. Buildings equipped with an automatic fire sprinkler or standpipe system shall have a fire hydrant within 100 feet (30 480 mm) of the fire department connection.

Exception: The distance shall be permitted to exceed 100 feet (30 480 mm) where *approved* by the *fire code official.*

Section 507.5.4 is amended to read as follows:

507.5.4 Obstruction. Unobstructed access to fire hydrants shall be maintained at all times. Posts, fences, vehicles, growth, trash, storage and other materials or objects shall not be placed or kept near fire hydrants, fire department inlet connections or fire protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible.

The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

Section 509.1 is amended by adding a new Section 509.1.2 to read as follows:

509.1.2 Sign Requirements. Unless more stringent requirements apply, lettering for signs required by this section shall have a minimum height of two (2) inches (50.8 mm) when located inside a building and four (4) inches (101.6 mm) when located outside, or as approved by the fire code official. The letters shall be of a color that contrasts with the background.

Section 603.3.2.1 is amended by changing the paragraph titled "Exception" to read in its entirety as follows:

> **Exception:** The aggregate capacity limit shall be permitted to be increased to 3,000 gallons (11,356 L) in accordance with all requirements of Chapter 57.
> {Remainder of Exception deleted.}

Section 603.3.2.2 is amended to read as follows:

603.3.2.2 Restricted use and connection. Tanks installed in accordance with Section 603.3.2 shall be used only to supply fuel oil to fuel-burning equipment installed in accordance with Section 603.3.2.4. Connections between tanks and equipment supplied by such tanks shall be made using closed piping systems.

Section 604.1.2 is amended to read as follows:

604.1.2 Installation. Emergency power systems and standby power systems shall be installed in accordance with the *International Building Code*, NFPA 70, NFPA 110 and NFPA 111. Existing installations shall be maintained in accordance with the original approval, except as specified in Chapter 11.

Section 604.1 is amended by adding Section 604.1.9 to read as follows:

Section 604.1.9 Critical Operations Power Systems (COPS). For Critical Operations Power Systems necessary to maintain continuous power supply to facilities or parts of facilities that require continuous operation for the reasons of public safety, emergency management, national security, or business continuity, see NFPA 70.

Section 604.2 is amended to read as follows:

604.2 Where Required. Emergency and standby power systems shall be provided where required by Sections 604.2.1 through 604.2.24 or elsewhere identified in this code or any other referenced code.

Section 604.2.4 is amended to read as follows:

604.2.4 Emergency Voice/alarm Communications Systems. Emergency power shall be provided for emergency voice/alarm communications systems in the following occupancies, or as specified elsewhere in this code, as required in Section 907.5.2.2.5. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72.

1. Covered and Open Malls, Section 907.2.20 and 914.2.3
2. Group A Occupancies, Sections 907.2.1 and 907.5.2.2.4.
3. Special Amusement Buildings, Section 907.2.12.3
4. High-rise Buildings, Section 907.2.13
5. Atriums, Section 907.2.14
6. Deep Underground Buildings, Section 907.2.19

Section 604.2.12 is amended to read as follows:

604.2.12 Means of Egress Illumination. Emergency power shall be provided for *means of egress* illumination in accordance with Sections 1008.3 and 1104.5.1. (90 minutes)

Section 604.2.13 is amended to read as follows:

604.2.13 Membrane Structures. Emergency power shall be provided for *exit* signs in temporary tents and membrane structures in accordance with Section 3103.12.6.1. (90 minutes) Standby power shall be provided for auxiliary inflation systems in permanent membrane structures in accordance with Section 2702 of the *International Building Code*. (4 hours) Auxiliary inflation systems shall be provided in temporary air-supported and air-inflated membrane structures in accordance with section 3103.10.4.

Section 604.2.15 is amended to read as follows:

604.2.15 Smoke Control Systems. Standby power shall be provided for smoke control systems in the following occupancies, or as specified elsewhere in this code, as required in Section 909.11:

1. Covered Mall Building, *International Building Code*, Section 402.7
2. Atriums, *International Building Code*, Section 404.7
3. Underground Buildings, *International Building Code*, Section 405.8
4. Group I-3, *International Building Code*, Section 408.4.2
5. Stages, *International Building Code*, Section 410.3.7.2
6. Special Amusement Buildings (as applicable to Group A's), *International Building Code*, Section 411.1
7. Smoke Protected Seating, Section 1029.6.2.1

Section 604.2 is amended by adding Sections 604.2.17 through 604.2.23 to read as follows:

604.2.17 Covered and Open Mall Buildings. Emergency power shall be provided in accordance with Section 907.2.20 and 914.2.3.

604.2.18 Smoke proof Enclosures and Stair Pressurization Alternative. Standby power shall be provided for smoke proof enclosures, stair pressurization alternative and associated automatic fire detection systems as required by the *International Building Code*, Section 909.20.6.2.

604.2.19 Elevator Pressurization. Standby power shall be provided for elevator pressurization system as required by the *International Building Code*, Section 909.21.5.

604.2.20 Elimination of Smoke Dampers in Shaft Penetrations. Standby power shall be provided when eliminating the smoke dampers in ducts penetrating shafts in accordance with the *International Building Code*, Section 717.5.3, exception 2.3.

604.2.21 Common Exhaust Systems for Clothes Dryers. Standby power shall be provided for common exhaust systems for clothes dryers located in multistory structures in accordance with the *International Mechanical Code,* Section 504.10, Item 7.

604.2.22 Hydrogen Cutoff Rooms. Standby power shall be provided for mechanical ventilation and gas detection systems of Hydrogen Cutoff Rooms in accordance with the *International Building Code*, Section 421.8.

604.2.23 Means of Egress Illumination in Existing Buildings. Emergency power shall be provided for *means of egress* illumination in accordance with Section 1104.5 when required by the fire code official. (90 minutes in I-2, 60 minutes elsewhere.)

Section 604 is amended by adding Section 604.8 to read as follows:

604.8 Energy Time Duration. Unless a time limit is specified by the fire code official, in this chapter or elsewhere in this code, or in any other referenced code or standard, the emergency and standby power system shall be supplied with enough fuel or energy storage capacity for not less than 2-hour full-demand operation of the system.

> **Exception:** Where the system is supplied with natural gas from a utility provider and is approved.

Section 609.2 is amended to read as follows:

609.2 Where Required. A Type I hood shall be installed at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors, including but not limited to cooking equipment used in fixed, mobile, or temporary concessions, such as trucks, buses, trailers, pavilions, or any form of roofed enclosure, as required by the fire code official.

> **Exceptions:**
> 1. Tents, as provided for in Chapter 31.
> 2. {No change to existing Exception 2.}

Additionally, fuel gas and power provided for such cooking appliances shall be interlocked with the extinguishing system, as required by Section 904.12.2. Fuel gas containers and piping/hose shall be properly maintained in good working order and in accordance with all applicable regulations.

Section 704.1 is amended to read as follows:

704.1 Enclosure. Interior vertical shafts including, but not limited to, *stairways*, elevator hoist ways, service and utility shafts, that connect two or more stories of a building shall be enclosed or protected in accordance with the codes in effect at the time of construction but, regardless of when constructed, not less than as required in Chapter 11. New floor openings in existing buildings shall comply with the *International Building Code.*

Section 807.3 is amended to read as follows:

807.3 Combustible Decorative Materials. In occupancies in Groups A, E, I, and R-1, and dormitories in Group R-2, curtains, draperies, fabric hangings and other similar combustible decorative materials suspended from walls or ceilings shall comply with Section 807.4 and shall not exceed 10 percent of the specific wall or ceiling area to which they are attached.

Section 807.5.2.2 is amended to read as follows:

807.5.2.2 Artwork in Corridors. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area. Such materials shall not be continuous from floor to ceiling or wall to wall. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

> **Exception:** Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent of the wall area.

Section 807.5.2.3 is amended to read as follows:

807.5.2.3 Artwork in Classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Section 807.5.5.2 is amended to read as follows:

Section 807.5.5.2 Artwork in Corridors. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area. Such materials shall not be continuous from floor to ceiling or wall to wall. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent of the wall area.

Section 807.5.5.3 is amended to read as follows:

Section 807.5.5.3 Artwork in Classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Section 901.6.3 is amended by amended to read as follows:

901.6.3 False Alarms and Nuisance Alarms. False alarms and nuisance alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner.

Section 901.6 is amended by adding Sections 901.6.4 and 901.6.5 to read as follows:

901.6.4 Systems in high-rise buildings. The owner of a high-rise building shall be responsible for assuring that the fire and life-safety systems required by the Building Code are maintained in an operable condition at all times. Unless otherwise required by the chief, quarterly tests of such systems shall be conducted by approved persons. A written record shall be maintained and shall be made available to the inspection authority.

901.6.5 Smoke-control systems. Mechanical smoke-control systems, such as those in high-rise buildings, buildings containing atria, covered mall buildings and mechanical ventilation systems utilized in smoke proof enclosures and for smoke-removal systems utilized in high-piled combustible storage occupancies, shall be maintained in an operable condition at all times. Unless otherwise required by the chief, quarterly tests of such systems shall be conducted by approved persons. A written record shall be maintained and shall be made available to the inspection authority.

Section 903.1.1 is amended to read as follows:

903.1.1 Alternative protection. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted in addition to automatic sprinkler protection where recognized by the applicable standard or as approved by the fire code official.

Section 903.2 is amended to read as follows:

Section 903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12. In addition to other sections of the 2015 International Fire Code, an approved automatic fire sprinkler system shall be installed in the occupancies and locations, excluding detached Group U (private garages, carports and sheds), as follows:

1. All new buildings two (2) or more stories in height.

   Exception: One and two family dwellings.

2. All new buildings two thousand five hundred (2,500) square feet or greater AND additions two thousand five hundred (2,500) square feet or greater to existing buildings.

   Exception: Detached Group U occupancies and one and two family dwellings

3. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all Group R-3 Townhouse Occupancies.

4. Group A-1. An automatic sprinkler system shall be provided for Group A-1 Occupancies where one of the following conditions exists:

   a. The fire area exceeds 2500 square feet (465 m^2).

   b. The fire area has an occupant load of 300 or more.

   c. The fire area is located on a floor other than the level of exit discharge.

   d. The fire area contains a multi-theater complex.

5. Group A-2. An automatic sprinkler system shall be provided for Group A-2 Occupancies where one of the following conditions exists:

   a. The fire area exceeds 2500 square feet (465 m^2).

   b. The fire area has an occupant load of 100 or more.

   c. The fire area is located on a floor other than the level of exit discharge.

6. Group A-3. An automatic sprinkler system shall be provided for Group A-3 Occupancies where one of the following conditions exists:

   a. The fire area exceeds 2500 square feet (465 m^2).

   b. The fire area has an occupant load of 300 or more.

   c. The fire area is located on a floor other than the level of exit discharge.

   Exception: Areas used exclusively as participant sports areas where the main floor area is located at the same level as the level of exit discharge of the main entrance and exit.

7. Group A-4. An automatic sprinkler system shall be provided for Group A-4 Occupancies where one of the following conditions exists:

   a. The fire area exceeds 2500 square feet (465 m^2).

   b. The fire area has an occupant load of 300 or more.

   c. The fire area is located on a floor other than the level of exit discharge.

8. All Group R-1 and R-2 occupancies.

9. All Group S-2 (open parking garages).

   Exception: Of noncombustible construction that has no other types of occupancies located above the garage and has a minimum of two complete sides unobstructed for fire department access by roadway or fire lane.

10. In all buildings and structures where Section 903.2 of the Fire Code requires sprinkler systems in buildings or structures of less than 2,500 square feet.

11. Throughout all self-service storage facilities.

    Exception: One-story self-service storage facilities that have no interior corridors, with a one-hour fire barrier separation wall installed between every storage compartment.

12. All stories and basements described in 903.2.11.1, 903.2.11.1.1, 903.2.11.1.2, and 903.2.11.1.3.

13. All rubbish and linen chutes as described in 903.2.11.2.

14. All other hazards as described in 903.2.11.4, and 903.2.11.5.

15. All other required suppression systems as described in 903.2.11.6.

16. High –Piled Combustible Storage. For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 32 to determine if those provisions apply.

17. New and existing spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system.

18. During construction as described in 903.2.12 and 3314.

19. All existing buildings two thousand five hundred (2,500) square feet or greater that change the occupancy type from a less hazardous to a more hazardous occupancy, based on life and fire risk.

Firewalls or fire barriers shall not be used to subdivide a building or structure into separate buildings to avoid the requirement to install a fire extinguishing system or automatic sprinkler system as required by this Section 903.2.

Section 903.1.1.1 is amended to read as follows:

903.3.1.1.1 Exempt locations. When approved by the building official and fire code official, automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion and/or rate of rise heat detectors. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard as determined by the building official or fire code official.

2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the building official or fire code official.

3. Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.

4. Elevator machine rooms, machinery spaces, and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.

Section 903.3.1.2 is amended by adding Section 903.3.1.2.3 to read as follows:

903.3.1.2.3 Attics, Open Breezeways, and Attached Garages. Sprinkler protection is required in attic spaces of such buildings two or more stories in height, open breezeways, and attached garages in accordance with NFPA 13 and or NFPA 13R requirements.

Section 903.3.1.3 is amended to read as follows:

903.3.1.3 NFPA 13D sprinkler systems. Automatic sprinkler systems installed in one- and two-family dwellings, Group R-3 and R-4 Condition 1 and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D or in accordance with state law.

Section 903.3.1 is amended by adding Section 903.3.1.4 to read as follows:

903.3.1.4 Freeze protection. Freeze protection systems for automatic fire sprinkler systems shall be in accordance with the requirements of the applicable referenced NFPA standard and this section.

903.3.1.4.1 Attics. Only dry-pipe, pre-action, or listed antifreeze automatic fire sprinkler systems shall be allowed to protect attic spaces.

Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:

1. The attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building, and

2. Adequate heat shall be provided for freeze protection as per the applicable referenced NFPA standard, and

3. The attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.

903.3.1.4.2 Heat trace/insulation. Heat trace/insulation shall only be allowed where approved by the fire code official.

Section 903.3.5 is amended to read as follows:

903.3.5 Water supplies. Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow in accordance with the requirements of this section and the International Plumbing Code. Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every fire protection system shall be designed with a 10 psi safety factor. Reference Section 507.4 for additional design requirements.

Section 903.4 is amended by adding the following paragraph after the *Exceptions*.

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

Section 903.4.2 is amended to read as follows:

903.4.2 Alarms. An approved audible device, located on the exterior of the building in an approved location, shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system. The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance

with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

Section 903.4.3 is amended to read as follows:

903.4.3 Floor control valves. Approved supervised indicating control valves and shall be provided at the point of connection to the riser on each floor in all buildings.

Section 905.2 is amended to read as follows:

905.2 Installation standards. Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual Dry Standpipes shall be supervised with a minimum of 10 psig and a maximum 40-psig-air pressure with a high/low alarm.

Section 905.3 is amended by adding Section 905.3.9 to read as follows:

905.3.9 Buildings Exceeding 10,000 sq. ft. In buildings exceeding 10,000 square feet in area per story and where any portion of the building's interior area is more than 150 feet (45720 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I automatic wet or manual wet standpipes shall be provided.

Exceptions:

1. Automatic dry and semi-automatic dry, or manual dry standpipes are allowed as provided for in NFPA 14 when approved by Code Official.

2. R-2 occupancies of four stories or less in height having no interior corridors.

Section 905.4 is amended to read as follows:

905.4 Location of Class I standpipe hose connections

Class I standpipe hose connections shall be provided in all of the following locations:

1. In every required exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at an intermediate landing between stories, unless otherwise approved by the fire code official.

2. On each side of the wall adjacent to the exit opening of a horizontal exit.

   Exception: Where floor areas adjacent to a horizontal exit are reachable from an interior exit stairway hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30480 mm) of hose, a hose connection shall not be required at the horizontal exit.

3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

   Exception: Where floor areas adjacent to an exit passageway are reachable from an exit stairway hose connection by a 30- foot (9144 mm) hose stream from a nozzle attached to 100 feet (30480 mm) of hose, a hose connection shall not be required at the entrance from the exit passageway to other areas of the building.

4. In covered mall buildings, adjacent to each exterior public entrance from an exit passageway or exit corridor to the mall. In open mall buildings, adjacent to each public entrance to the mall at the perimeter line and adjacent to each entrance from an exit passageway or exit corridor to the mall.

5. Where the roof has a slope less than four unit's vertical in 12 unit's horizontal (33.3-percent slope), each standpipe shall be provided with a two-way ~~a~~ hose connection located to serve the roof or at the highest landing of an exit stairway with stair access to the roof provided in accordance with Section 1011.12.

6. Where the most remote portion of a nonsprinklered floor or story is more than 150 feet (45720 mm) from a hose connection or the most remote portion of a sprinklered floor or story is more than 200 feet (60960 mm) from a hose connection, the fire code official is authorized to require that additional hose connections be provided in approved locations.

7. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred feet (200') intervals along major corridors thereafter, or as otherwise approved by the fire code official.

Section 905.9 is amended by adding the following paragraph after the *Exceptions*:

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

Paragraph 1 of Section 906.1 is amended to read in its entirety as follows, including the deletion of the *Exception*:

1. In new and existing Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies

Section 907.1 is amended by adding Section 907.1.4 to read as follows:

907.1.4 Design Standards. Where a new fire alarm system is installed, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke detectors shall have analog initiating devices.

Section 907.2.1 is amended to read as follows:

907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies having an occupant load of 300 or more persons or more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3.10 of the International Building Code shall be considered as a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Activation of fire alarm notification appliances shall:

1. Cause illumination of the means of egress with light of not less than 1 foot-candle (11lux) at the walking surface level, and

2. Stop any conflicting or confusing sounds and visual distractions.

Section 907.2.3 is amended to read in its entirety as follows:

907.2.3 Group E. A manual fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E educational occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarms system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100' open space, all buildings, where portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

Exceptions:

1. A manual fire alarm system is not required in Group E occupancies with an occupant load of 50 or less when provided with an approved automatic sprinkler system.

   1.1 Residential In-Home day care with not more than 12 children may use hard-wired or wireless interconnected single station detectors with battery backup in all habitable rooms. (For care of more than five children 2 ½ or less years of age, see Section 907.2.6).

2. Emergency voice/alarm communication systems meeting the requirements of section 907.5.2.2 and installed in accordance with section 907.6 shall not be required in Group E occupancies with occupant loads of 100 or less, provided that activation of the manual fire alarm system initiates an *approved* occupant notification signal in accordance with Section 907.5.

Section 907.2.4 is amended by deleting the paragraph titled "Exception."

Section 907.2.7 is amended by amending Exception 1 to read as follows and deleting Exception 2:

Exception:

1. A manual fire alarm system is not required in covered mall buildings complying with Section 402 of the International Building Code.

Section 907.2.8.1 is amended by deleting Exceptions 2, 2.1, 2.2, and 2.3.

Section 907.2.9.1 is amended by deleting Exceptions 2 and 3.

Section 907.2.11.2 is amended by adding the following sentence at the end of the section.

All smoke alarms shall be listed and installed in accordance with the provisions of this code and the household fire warning equipment provisions of NFPA 72.

Exception 3 in Section 907.2.13 is amended to read as follows:

3. Open air portions of buildings with an occupancy in Group A-5 in accordance with Section 303.1; however, this exception does not apply to accessory uses including but not limited to skyboxes, restaurants and similarly enclosed areas.

Section 907.2.13.1.1 is amended by amending numbered paragraph 1 and adding a new numbered paragraph 3 to read as follows:

1. In each mechanical equipment, electrical, transformer, telephone equipment or similar room, and Central Control Station.

* * *

3. For Group R, Division 1 Occupancies, in all interior corridors serving as a means of egress for an occupant load of 10 or more.

Section 907.4.2 is amended by adding Section 907.4.2 to read as follows:

907.4.2.7 Type. Manual alarm actuating devices shall be an approved double action type.

Section 907.6.1 is amended by adding Section 907.6.1.1 to read as follows:

907.6.1.1 Wiring Installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA

72 requirements for Class A circuits and shall have a minimum of four feet separation horizontal and one foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from an addressable input (monitor) module may be wired Class B, provided the distance from the addressable module to the initiating device is ten feet or less.

Section 907.6.3 is amended by delete all "Exceptions."

Section 907.6.4.2 is amended to read as follows:

907.6.4.2 High-rise buildings. In high-rise buildings, a separate zone by floor or an addressable fire alarm system shall be provided, based on the current fire alarm system installation for each of the following types of alarm-initiating devices where provided:

1. Smoke detectors
2. Sprinkler waterflow devices.
3. Manual fire alarm boxes.
4. Other approved types of automatic fire detection devices or suppression systems.
5. In Group B office buildings, corridor walls and ceilings need not be of fire resistive construction within office spaces of a single tenant when the space is equipped with an automatic smoke-detection system within the corridor. The actuation of any detector shall activate alarms audible in all areas served by the corridor. The smoke-detection system shall be connected to the building's fire alarm system where such a system is provided.

Section 907.6.6 is amended by adding a sentence at the end of paragraph to read as follows:

See 907.6.3 for the required information transmitted to the supervising station.

Section 907.6.6 is amended by adding Section 907.6.6.3 to read as follows:

907.6.6.3 Communication requirements. All alarm systems, new or replacement, shall transmit alarm, supervisory and trouble signals descriptively to the approved central station, remote supervisory station or proprietary supervising station as defined in NFPA 72, with the correct device designation and location of addressable device identification. Alarms shall not be permitted to be transmitted as a general alarm or zone condition.

Section 909.2 is amended by adding Section 909.2.1 to read as follows:

909.2.1 Smoke-control System for High-Rises. A smoke control system meeting the requirements of Section 909 in the International Fire Code-2015 Edition and this code shall be provided for high-rise buildings.

Section 909 is amended by adding Section 909.22 and related subsections to read as follows:

909.22 Stairway or Ramp Pressurization Alternative. Where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and the stair pressurization alternative is chosen for compliance with Building Code requirements for a smoke proof enclosure, interior exit stairways or ramps shall be pressurized to a minimum of 0.10 inches of water (25 Pa) and a maximum of 0.35 inches of water (87 Pa) in the shaft relative to the building measured with all interior exit stairway and ramp doors closed under maximum anticipated conditions of stack effect and wind effect. Such systems shall comply with Section 909, including the installation of a separate fire-fighter's smoke control panel as per Section 909.16, and a Smoke Control Permit shall be required from the fire department as per Section 105.7.

909.22.1 Ventilating equipment. The activation of ventilating equipment for the stair or ramp pressurization system shall be by smoke detectors installed at each floor level at an approved location at the entrance to the smoke proof enclosure. When the closing device for the stairway or ramp shaft and vestibule doors is activated by smoke detection or power failure, the mechanical equipment shall activate and operate at the required performance levels. Smoke detectors shall be installed in accordance with Section 907.3.

909.22.1.1 Ventilation Systems. Smoke proof enclosure ventilation systems shall be independent of other building ventilation systems. The equipment, control wiring, power wiring and ductwork shall comply with one of the following:

1. Equipment, control wiring, power wiring and ductwork shall be located exterior to the building and directly connected to the smoke proof enclosure or connected to the smoke proof enclosure by ductwork enclosed by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

2. Equipment, control wiring, power wiring and ductwork shall be located within the smoke proof enclosure with intake or exhaust directly from and to the outside or through ductwork enclosed by not less than 2-hour barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

3. Equipment, control wiring, power wiring and ductwork shall be located within the building if separated from the remainder of the building, including other mechanical equipment, by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

Exceptions:

1. Control wiring and power wiring utilizing a 2-hour rated cable or cable system.

2. Where encased with not less than 2 inches (51 mm) of concrete.

3. Control wiring and power wiring protected by a listed electrical circuit protective systems with a fire-resistance rating of not less than 2 hours.

909.22.1.2 Standby Power. Mechanical vestibule and stairway and ramp shaft ventilation systems and automatic fire detection systems shall be provided with standby power in accordance with Section 2702 of the Building Code.

909.22.1.3 Acceptance and Testing. Before the mechanical equipment is approved, the system shall be tested in the presence of the fire code official to confirm that the system is operating in compliance with these requirements.

Section 910.2 is amended by amending Exceptions 2 and 3 to read as follows:

2. Where areas of buildings are equipped with early suppression fast-response (ESFR) sprinklers, only manual smoke and heat vents or manually activated engineered mechanical smoke exhaust systems shall be required within these areas. Automatic smoke and heat vents are prohibited.

3. Only manual smoke and heat removal shall be required in areas of buildings equipped with control mode special application sprinklers with a response time index of $50(m*s)^{1/2}$ or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.

Section 910.2 is amended by adding Section 910.2.3 to read as follows:

910.2.3 Group H. Buildings and portions thereof used as a Group H occupancy as Section follows:

1. In occupancies classified as Group H-2 or H-3, any of which are more than 5,000 square feet in single floor area.

   Exception: Buildings of noncombustible construction containing only noncombustible materials.

2. In areas of buildings in Group H used for storing Class 2, 3, and 4 liquid and solid oxidizers, Class 1 and unclassified detonable organic peroxides, Class 3 and 4 unstable (reactive) materials, or Class 2 or 3 water-reactive materials as required for a high-hazard commodity classification.

   Exception: Buildings of noncombustible construction containing only noncombustible materials.

Section 910.3 is amended by adding Section 910.3.4 and related subsections to read as follows:

910.3.4 Vent Operation. Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.3.2.1 through 910.3.2.3.

910.3.4.1 Sprinklered buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically. The automatic operating mechanism of the smoke and heat vents shall operate at a temperature rating at least 100 degrees F (approximately 38 degrees Celsius) greater than the temperature rating of the sprinklers installed.

Exception: Manual only systems per Section 910.2.

910.3.4.2 Nonsprinklered Buildings. Where installed in buildings not equipped with an approved automatic sprinkler system, smoke and heat vents shall operate automatically by actuation of a heat-responsive device rated at between 100°F (56°C) and 220°F (122°C) above ambient.

Exception: Listed gravity-operated drop out vents.

910.3.4.3 Gravity-operated drop out vents. Automatic smoke and heat vents containing heat sensitive glazing designed to shrink and drop out of the vent opening when exposed to fire shall fully open within 5 minutes after the vent cavity is exposed to a simulated fire represented by a time-temperature gradient that reaches an air temperature of 500 degrees F (260 degrees C) within 5 minutes

Section 910.4.4 is amended to read as follows:

910.4.4 Activation. The mechanical smoke removal system shall be activated automatically by the automatic sprinkler system or by an approved fire detection system. Individual manual controls shall also be provided.

Exception: Manual only systems per Section 910.2.

Section 912.2 is amended by adding Section 912.2.3 to read as follows:

912.2.3 Hydrant Distance. An approved fire hydrant shall be located within 100 feet of the fire department connection as the fire hose lays along an unobstructed path.

Section 913.2.1 is amended by adding the following second paragraph and exception to read as follows:

When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 ft. in width and 6 ft. – 8 in. in height,

regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1.

> **Exception:** When it is necessary to locate the fire pump room on other levels or not at an exterior wall, the corridor leading to the fire pump room access from the exterior of the building shall be provided with equivalent fire resistance as that required for the pump room, or as approved by the *fire code official*. Access keys shall be provided in the key box as required by Section 506.1.

Section 914.3.1 is amended to read as follows, including deletion of the Exception:

914.3.1 Automatic sprinkler system. Buildings and structures shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and a secondary water supply where required by Section 914.3.1.2

Section 914.3.1.2 is amended to read as follows:

914.3.1.2 Water Supply to required Fire Pumps. In buildings that are more than 120 feet (128 m) in *building height*, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

> **Exception:** {No change to exception.}

Chapter 10 is amended by replacing all references to "fire code official" with "building official."

Section 1006.2.2 is amended by adding Section 1006.2.2.6 to read as follows:

1006.2.2.6 Electrical Rooms. For electrical rooms, special exiting requirements may apply. Reference the Electrical Code as adopted.

Section 1009.1 is amended by adding Exception 4 to read as follows:

4. Buildings regulated under State Law and built in accordance with State registered plans, including any variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1009.

Section 1010.1.9.4 is amended by amending Exceptions 3, 4, and 5 to read as follows:

3. Where a pair of doors serves an occupant load of less than 50 persons in a Group B, F, M, or S occupancy, manually operated edge-or surface-mounted bolts are permitted on the inactive leaf. The inactive leaf shall contain no doorknobs, panic bars or similar operating hardware.

4. Where a pair of doors serves a Group A, B, F, M or S occupancy, manually operated edge- or surface-mounted bolts are permitted on the inactive leaf provided such inactive leaf is not needed to meet egress width requirements and the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. The inactive leaf shall contain no doorknobs, panic bars or similar operating hardware.

5. Where a pair of doors serves patient care rooms in Group I-2 occupancies, self-latching edge- or surface-mounted bolts are permitted on the inactive leaf provided that the inactive leaf is not needed to meet egress width requirements and the inactive leaf contains no doorknobs, panic bars or similar operating hardware.

Section 1010.1.9.8 is amended by adding paragraphs 7 and 8 to read as follows:

7 The building must be protected throughout by a monitored automatic fire sprinkler system with an approved smoke detector located on the egress side within 15 feet of the door OR for non-sprinklered buildings; an approved automatic smoke detection system is required in the path of egress.

8. The doors shall be capable of being deactivated by a signal from a switch located in a location approved approve by the Fire Department.

Section 1010.1.9.9 is amended by adding paragraphs 7, 8, and 9 to read as follows:

7 Activation of the building *automatic sprinkler system* or fire detection system shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.

8. The building must be protected throughout by a monitored automatic fire sprinkler system with an approved smoke detector located on the egress side within 15 feet of the door OR for non-sprinklered buildings; an approved automatic smoke detection system is required in the path of egress.

9. The doors shall be capable of being deactivated by a signal from a switch located in a location approved approve by the Fire Department.

Section 1015.8 is amended by amending paragraph 1 to read as follows:

1. Operable windows where the top of the sill of the opening is located more than 55-ft (16 764 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F 2006.

Section 1020.1 is amended by adding Exception 6 to read as follows:

6. In Group B office buildings, corridor walls and ceilings need not be of fire-resistive construction within a single tenant space when the space is equipped with approved automatic smoke-detection within the corridor. The actuation of any detector shall activate self-annunciating alarms audible in all areas within the corridor. Smoke detectors shall be connected to an approved automatic fire alarm system where such system is provided.

Section 1020.6 is amended to read as follows:

1020.6 Corridor continuity. All corridors shall be continuous from the point of entry to an exit, and shall not be interrupted by intervening rooms. {*remainder of section remains unchanged*}

Section 1029.1.1.1 is deleted.

Section 1031.2 is amended to read as follows:

1031.2 Reliability. Required exit accesses, exits and exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency. An exit or exit passageway shall not be used for any purpose that interferes with a means of egress.

Section 1103.3 is amended by adding the following sentence to end of paragraph:

Provide emergency signage as required by Section 607.3.

Section 1103.7.5.1 is amended by deleting Exceptions 2, 2.1, 2.2, and 2.3.

Section 1103.7 is amended by adding Sections 1103.7.8 and 1103.7.8.1 to read as follows:

1103.7.8 Fire Alarm System Design Standards. Where an existing fire alarm system is upgraded or replaced, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke and/or heat detectors shall have analog initiating devices.

Exception: Existing systems need not comply unless the total building, or fire alarm system, remodel or expansion exceeds 30% of the building. When cumulative building, or fire alarm system, remodel or expansion initiated after the date of original fire alarm panel installation exceeds 50% of the building, or fire alarm system, the fire alarm system must comply within 18 months of permit application.

1103.7.8.1 Communication requirements. Refer to Section 907.6.6 for applicable requirements.

Section 2304.1 is amended to read as follows:

2304.1 Supervision of Dispensing. The dispensing of fuel at motor fuel-dispensing facilities shall be in accordance with the following:

1. Conducted by a qualified attendant; and/or,

2. Shall be under the supervision of a qualified attendant; and/or

3. Shall be an unattended self-service facility in accordance with Section 2304.3.

At any time the qualified attendant of item Number 1 or 2 above is not present, such operations shall be considered as an unattended self-service facility and shall also comply with Section 2304.3.

Section 2401.2 is deleted.

Table 3206.2 is amended by amending Footnote j to read as follows:

j. Where storage areas are protected by either early suppression fast response (ESFR) sprinkler systems or control mode special application sprinklers with a response time index of 50 (m • s) 1/2 or less that are listed to control a fire in the stored commodities with 12 or fewer sprinklers, installed in accordance with NFPA 13, manual smoke and heat vents or manually activated engineered mechanical smoke exhaust systems shall be required within these areas.

Section 3310.1 is amended to read as follows:

3310.1 Required access. Approved vehicle access for firefighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 feet (30 480 mm) of temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of supporting an 80,000 lb. vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available. When fire apparatus access roads are required to be installed for any structure or development, they shall be approved prior to the time of which construction has progressed beyond completion of the foundation of any structure.

Section 5601.1.3 is amended to read in its entirety as follows:

5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling and use of fireworks are prohibited.

Exceptions:

1. Only when approved for fireworks displays, storage and handling of fireworks as allowed in Section 5604 and 5608.

2. The use of fireworks for approved displays as allowed in Section 5608.

Section 5703.6 is amended to read as follows:

5703.6 Piping Systems. Piping systems, and their component parts, for flammable and combustible liquids shall be in accordance with Section 5703.6.1 through 5703.6.11. An approved method of secondary containment shall be provided for underground tank and piping systems.

Section 5704.2.9.5 is amended to read as follows:

5704.2.9.5 Above-ground tanks inside of buildings. Above-ground tanks inside of buildings shall comply with Sections 5704.2.9.5.1 and 5704.2.9.5.2 through 5704.2.9.5.3. Storage of flammable or combustible liquids or hazardous materials in above-ground tanks inside of buildings is prohibited within limits established by law in the adopting ordinance as the limits of districts in which such storage is prohibited. The storage of flammable or combustible liquids or hazardous materials in aboveground tanks is prohibited in residential areas.

Section 5704.2.9.5 is amended by adding Section 5704.2.9.5.3 to read as follows:

5704.2.9.5.3 Combustible Liquid Storage Tanks Inside of Buildings. The maximum aggregate allowable quantity limit shall be 3,000 gallons (11 356 L) of Class II or III combustible liquid for storage in protected aboveground tanks complying with Section 5704.2.9.7 when all of the following conditions are met:

1. The entire 3,000 gallon (11 356 L) quantity shall be stored in protected above-ground tanks;

2. The 3,000 gallon (11 356 L) capacity shall be permitted to be stored in a single tank or multiple smaller tanks;

3. The tanks shall be located in a room protected by an *automatic sprinkler system* complying with Section 903.3.1.1; and

4. Tanks shall be connected to fuel-burning equipment, including generators, utilizing an *approved* closed piping system.

The quantity of combustible liquid stored in tanks complying with this section shall not be counted towards the maximum allowable quantity set forth in Table 5003.1.1(1), and such tanks shall not be required to be located in a control area. Such tanks shall not be located more than two stories below grade.

Section 5704.2.9.6 is amended to read as follows:

5704.2.9.6 Above-ground tanks outside of buildings. Above-ground tanks outside of buildings shall comply with Sections 5704.2.9.6.1 through 5704.2.9.6.3. The storage of flammable or combustible liquids or hazardous materials in aboveground tanks is prohibited in residential areas.

Section 5704.2.11.1 is amended by adding a paragraph 4 to read as follows:

4. The storage of flammable or combustible liquids or hazardous materials in underground tanks is prohibited in residential areas.

Section 5704.2.11.4 is amended to read as follows:

5704.2.11.4 Leak Prevention. Leak prevention for underground tanks shall comply with Sections 5704.2.11.4.1 through 5704.2.11.4.3. An *approved* method of secondary containment shall be provided for underground tank and piping systems.

Section 5704.2.11.4.2 is amended to read as follows:

5704.2.11.4.2 Leak Detection. Underground storage tank systems shall be provided with an *approved* method of leak detection from any component of the system that is designed and installed in accordance with NFPA 30 and as specified in Section 5704.2.11.4.3

Section 5704.2.11.4 is amended by adding Section 5704.2.11.4.3 to read as follows:

5704.2.11.4.3 Observation wells. Approved sampling tubes of a minimum 4 inches in diameter shall be installed in the backfill material of each underground flammable or combustible liquid storage tank. The tubes shall extend from a point 12 inches below the average grade of the excavation to ground level and shall be provided with suitable surface access caps. Each tank site shall provide a sampling tube at the corners of the excavation with a minimum of 4 tubes. Sampling tubes shall be placed in the product line excavation within 10 feet of the tank excavation and one every 50 feet routed along product lines towards the dispensers, a minimum of two are required.

Section 5704.3.8 is amended to read as follows:

5704.3.8 Liquid storage warehouses. The storage of flammable liquids as specified in Chapter 57 as "Liquid Storage Warehouses" is prohibited.

Section 5706.5.4.5 is amended to read as follows:

5706.5.4.5 Commercial, industrial, governmental or manufacturing. Dispensing of Class I, II, and III motor vehicle fuel from tank vehicles into the fuel tanks of motor vehicles located in open areas at commercial, industrial, governmental or manufacturing establishments is allowed where permitted, provided such dispensing operations are conducted in accordance with the following:

1 Dispensing shall occur only at *approved* locations at sites that have been issued a mobile fueling site permit that allows mobile fueling by permitted mobile fueling operators in accordance with Section 105.6.17.

2 Mobile fuel delivery to vehicles located inside or on the roof level of parking structures or other buildings is prohibited.

Exception: When approved by the *fire code official*, mobile fuel delivery to vehicles located on the roof level of parking structures or other buildings may be allowed where there is exterior vehicular access from grade level.

3. The *owner* of a mobile fueling operation shall develop a written safety and emergency response plan that:

3.1. establishes policies and procedures for fire safety, spill prevention and control, personnel training and compliance with other applicable requirements of this code;

3.2. demonstrates readiness to respond to a fuel spill and carry out appropriate mitigation measures, and

3.3. describes the process to dispose properly of contaminated materials.

The plan shall be submitted to the *fire code official* prior to approval of the permit application to conduct mobile fueling operations. It shall be maintained and updated by the permittee as needed and made available to the *fire code official* upon request.

4. A detailed site plan shall be submitted with each application for a mobile fueling site permit. The site plan shall indicate: all buildings, structures and appurtenances on site and their use or function; all uses adjacent to the lot lines of the site; the locations of all storm drain openings, adjacent waterways or wetlands; information regarding slope, natural drainage, curbing, impounding and how a spill will be retained upon the site property; and the scale of the site plan.

5. Provisions shall be made at mobile fueling sites to prevent liquids spilled during dispensing operations from flowing into buildings or off-site. Acceptable methods include, but shall not be limited to, grading driveways, raising doorsills or other *approved* means.

6. The *fire code official* is allowed to impose limits on the times and days during which mobile fueling operations are allowed to take place, and specific locations on a site where fueling is permitted.

7. Mobile fueling operations shall be conducted in areas not accessible to the public or shall be limited to times when the public is not present within 15 feet (4572 mm) of dispensing operations.

8. Mobile fueling of Class I liquids shall not take place within 25 feet (7620 mm) of buildings, *lot lines* including those on a *public way*, combustible storage or storm drains measured from the dispensing nozzle. Mobile fueling of Class II and Class III liquids shall not take place within 15 feet (4572 mm) of buildings, *lot lines* including those on a *public way*, combustible storage or storm drains measured from the dispensing nozzle.

Exceptions:

1. The distance to storm drains shall not apply where an approved storm drain cover or an approved equivalent that will prevent any fuel from reaching the drain is in place prior to fueling or a fueling hose being placed within the applicable setback distance from the drain. Where placement of a storm drain cover will cause the accumulation of excessive water or difficulty in conducting the fueling, such cover shall not be used and the fueling shall not take place within the applicable setback distance from the drain.

2. The distance to storm drains shall not apply for drains that direct influent to approved *oil* interceptors.

3. Where *approved* by the *fire code official* and where an *approved* means of vapor recovery is utilized during fueling operations, mobile fueling of Class I liquids shall not take place within 15 feet (7620 mm) of buildings, *lot lines* including those on a *public way*, combustible storage or storm drains measured from the dispensing nozzle.

9 The tank vehicle shall comply with the requirements of Section 5706.6, NFPA 385 and local, state and federal requirements. The tank vehicle's specific functions shall include that of supplying fuel to motor vehicle fuel tanks. The vehicle and all its equipment shall be maintained in good repair.

10. Tank vehicles used to dispense Class I fuels into the fuel tanks of motor vehicles shall have a maximum aggregate cargo capacity of 1,200 gallons.

11. Signs prohibiting smoking or open flames within 25 feet (7620 mm) of the tank vehicle or the point of fueling shall be prominently posted on not less than three sides of the vehicle including the back and both sides.

12. A portable fire extinguisher with a minimum rating of 40:BC shall be provided on the tank vehicle with signage clearly indicating its location.

13. Mobile fueling equipment and appurtenances shall be of an *approved* or *listed* type.

14. The dispensing hose of Class II and III liquids shall not be extended from the reel more than 100 feet (30 480 mm) in length. The dispensing hose of Class I liquids shall not be extended from the reel more than 50 feet (15 240 mm) in length.

15. Absorbent materials, nonwater-absorbent pads, a 10-foot-long (3048 mm) containment boom, an approved container with lid and a nonmetallic shovel shall be provided to mitigate a minimum 5-gallon (19 L) fuel spill.

16. Tank vehicles shall be equipped with a "fuel limit" switch, such as a count-back switch, to limit the amount of a single fueling operation to not more than 500 gallons (1893 L) of Class II or III liquids or 30 gallons (13.6 L) of Class I liquids before resetting the limit switch.

    Exception: Tank vehicles where the operator carries and can utilize a remote emergency shutoff device which, when activated, immediately causes flow of fuel from the tank vehicle to cease.

17. Persons responsible for dispensing operations shall be trained in the appropriate mitigating actions in the event of a fire, leak or spill. Training records shall be maintained by the dispensing company.

18. Operators of tank vehicles used for mobile fueling operations shall have in their possession at all times an emergency communications device to notify the proper authorities in the event of an emergency.

19. The tank vehicle dispensing equipment shall be constantly attended and operated only by designated personnel who are trained to handle and dispense motor fuels.

20. Fuel dispensing shall be prohibited within 25 feet (7620 mm) of any source of ignition. Fixed or portable electrical equipment located within 5 feet (1524 mm) of the point of connection, extending in all directions, and up to 18 inches (450 mm) above grade level within a horizontal radius of 10 feet (3048 mm) from Class I liquid dispensing operations shall be rated for use in Class I, Division 2 hazardous locations in accordance with NFPA 70.

21. The engines of vehicles being fueled shall be shut off during dispensing operations.

22. Nighttime fueling operations shall ~~only~~ take place only in adequately-lighted areas.

23. The tank vehicle shall be positioned with respect to vehicles being fueled to prevent traffic from driving over the delivery hose.

24. Tank vehicles and fuel delivery equipment shall not be positioned in a manner that obstructs emergency vehicle access roads.

25. The parking or staging and garaging of tank vehicles shall comply with Section 5706.6.2. Tank vehicles shall not be used as storage tanks.

26. During fueling operations, tank vehicle brakes shall be set, chock blocks shall be in place and warning lights shall be in operation.

27. Motor vehicle fuel tanks shall not be topped off.

28. The dispensing hose shall be properly placed on an *approved* reel or in an *approved* compartment prior to moving the tank vehicle.

29. The *fire code official* and other appropriate authorities shall be immediately notified when a reportable spill or unauthorized discharge occurs.

30. Operators shall place a drip pan or an absorbent pillow under each fuel fill opening prior to and during dispensing operations. Drip pans shall be liquid-tight. The pan or absorbent pillows shall have a capacity of not less than 3 gallons (11.36 L). Spills retained in the drip pan or absorbent pillow need not be reported. Operators, when fueling, shall have on their person an absorbent pad capable of capturing fuel overfills. Except during fueling, the nozzle shall face upward and an absorbent pad shall be kept under the nozzle to catch drips. Contaminated absorbent pads or pillows shall be disposed of regularly in accordance with local, state and federal regulations.

    Exception: The pan or absorbent pillows shall have a capacity of not less than 1 gallon (3.79 L) when single fueling operations are limited to not more than 30 gallons.

Section 5706.5.4 is amended by adding Sections 5706.5.4.6 and 5706.5.4.7 to read as follows:

5706.5.4.6 Commercial, industrial, governmental or manufacturing or other approved locations from other than tank vehicles. Dispensing of Class I, II and III motor vehicle fuel from mobile fueling vehicles not classified as tank vehicles into the fuel tanks of motor vehicles located in open areas at commercial, industrial, governmental or manufacturing establishments, or other approved locations is allowed where permitted, provided such dispensing operations are conducted in accordance with this section. Individual fuel supply tanks for mobile fueling installed on mobile fueling vehicles used to dispense fuels into the fuel tanks of motor vehicles shall have a maximum individual fuel capacity of 110 gallons. The maximum aggregate amount of all mobile fueling fuel supply tanks shall not exceed that allowed by local, state, and federal regulations not to exceed 1,100 gallons.

1. Dispensing shall occur only at *approved* locations that have been issued a mobile fueling site permit that allows mobile fueling by permitted mobile fueling operators in accordance with Section 105.6.17.

2. Mobile fuel delivery to vehicles located inside or on the roof level of parking structures or other buildings is prohibited.

    Exception: When approved by the fire code official, mobile fuel delivery to vehicles located on the roof level of parking structures or other buildings may be allowed where there is exterior vehicular access from grade level.

3. The *owner* of a mobile fueling operation shall develop and provide a written safety and emergency response plan that:

   3.1. establishes policies and procedures for fire safety, spill prevention and control, personnel training and compliance with other applicable requirements of this code;

   3.2. demonstrates readiness to respond to a fuel spill and carry out appropriate mitigation measures; and

   3.3. describes the process to dispose properly of contaminated materials.

   The plan shall be submitted to the *fire code official* prior to approval of the permit application to conduct mobile fueling operations. It shall be maintained and updated when necessary by the permittee. Any modifications to an approved plan shall be submitted as needed and made available to the *fire code official* for review and approval.

4. The times and days during which mobile fueling operations are permitted to take place shall be approved by the *fire code official*. Nighttime fueling operations shall only take place only in adequately-lighted areas.

5. Where required by the fire code official, a detailed site plan shall be submitted with each application for a mobile fueling site permit. The site plan shall indicate: all buildings, structures and appurtenances on site and their use or function; all uses adjacent to the lot lines of the site; the locations of all storm drain openings, adjacent waterways or wetlands; information regarding slope, natural drainage, curbing, impounding and how a spill will be retained upon the site property; and the scale of the site plan.

6. Provisions shall be made at mobile fueling locations to prevent liquids spilled during dispensing operations from flowing into buildings or off-site. Acceptable methods include, but shall not be limited to, grading driveways, raising doorsills, placement of absorbent socks, booms or pads or other *approved* means.

7. Mobile fueling of Class II or III liquids shall not take place within 15 feet (4572 mm) of buildings, property lines, combustible storage or storm drains. Mobile fueling of Class I liquids shall not take place within 25 feet (7620 mm) of buildings, *lot lines*, public streets, public alleys, *public ways*, combustible storage or storm drains measured from the dispensing nozzle.

   Exception: The distance to storm drains shall not apply where an approved storm drain cover or an approved equivalent that will prevent any fuel from reaching the drain is in place prior to fueling.

8. Fuel dispensing shall be prohibited within 25 feet (7620 mm) of sources of ignition, including electrical, in accordance with 5003.7. Signs prohibiting smoking or open flames within 25 feet (7620 mm) of the mobile fueling vehicle or the point of fueling shall be

prominently posted on not less than three sides of the vehicle including the back and both sides. The engines of vehicles being fueled shall be shut off during dispensing operations.

9. The dispensing hose used for dispensing of Class II and III liquids shall not be extended from the reel more than 100 feet (30 480 mm) in length. The dispensing hose used for dispensing of Class I liquids shall not be extended from the reel more than 50 feet (15 240 mm) in length. The nozzle, when the hose is fully extended, shall not reach within 5 feet (1524 mm) of building openings.

10. Mobile fueling vehicles and fuel delivery equipment shall not be positioned in a manner that obstructs emergency vehicle access roads. The mobile fueling vehicle shall be positioned with respect to vehicles being fueled to prevent traffic from driving over the delivery hose.

11. Mobile fueling vehicles shall be equipped with a "fuel limit" switch, such as a count-back switch, to limit the amount of a single fueling operation to not more than 30 gallons before resetting the limit switch.

    Exception: Mobile fueling vehicles where the operator carries and can utilize a remote emergency shut off device which, when activated, immediately causes flow of fuel from the tank vehicle to cease.

12. Absorbent materials, non-water-absorbent pads, containment booms, an approved container with lid and a nonmetallic shovel shall be provided to mitigate potential spills.

13. The mobile fueling vehicle dispensing equipment shall be constantly attended and operated only by designated personnel who are trained to handle and dispense motor fuels.

14. Persons responsible for dispensing operations shall be trained in the appropriate mitigating actions in the event of a fire, leak or spill. Training records shall be maintained by the dispensing company and made available to the fire code official.

15. A portable fire extinguisher with a minimum rating of 40:BC shall be provided on the mobile fueling vehicle with signage clearly indicating its location.

16. Operators of mobile fueling vehicles used for mobile fueling operations shall have in their possession at all times an emergency communication device to notify the proper authorities in the event of an emergency.

17. During fueling operations, mobile fueling vehicles brakes shall be set, chock blocks shall be in place and warning lights shall be in operation.

18. Operators shall place an absorbent pillow under each fuel fill opening prior to and during dispensing operations. The absorbent pillows shall have a capacity of not less than 1 gallon. Spills retained in absorbent pillow need not be reported.

19. The engines of vehicles being fueled shall be shut off during dispensing operations.

20. Any unauthorized discharge of motor fuel shall comply with Section 5003.3.1.

21. The dispensing hose shall be properly secured on an *approved* reel or in an *approved* compartment prior to moving the tank vehicles.

22. The parking or staging and garaging of mobile fueling vehicles shall comply with Section 5706.6.2. Mobile fueling vehicles shall not be used as storage tanks.

23. The tank vehicle's specific function shall include that of supplying fuel to motor vehicle fuel tanks. The vehicle and all its equipment shall be maintained in good repair.

24. Mobile fueling vehicles shall comply with applicable local, state and federal requirements. Documentation shall be provided upon request.

25. Individual fuel supply tanks for mobile fueling installed on mobile fueling vehicles used to dispense fuels into the fuel tanks of motor vehicles shall have a maximum individual fuel capacity of 110 gallons. The maximum aggregate amount of all mobile fueling fuel supply tanks shall not exceed that allowed by local, state, and federal regulations not to exceed 1,100 gallons.

26. Individual fuel supply tanks for mobile fueling shall not be manifold together through the same dispensing pump.

27. Mobile fuel dispensing equipment and appurtenances, shall be *listed* or *approved.*

28. Mobile fueling operations shall be limited to times when the public is not present within 15 feet (4572 mm) of dispensing operations.

5706.5.4.7 Dispensing motor vehicle fuel from portable containers. Dispensing of Class I, II and III motor vehicle fuel from portable containers into the fuel tanks of motor vehicles where the aggregate container capacity does not exceed 60 gallons is allowed where permitted within jurisdictions, provided such dispensing operations are conducted in accordance with the following:

Exception: Fueling from approved portable containers in cases of an emergency or for personal use.

1. Where required, the mobile fueling operator shall be required to obtain a permit with *the fire code official.*

2. The *operator* of a mobile fueling operation shall develop a written safety and emergency response plan that

    2.1. establishes policies and procedures for fire safety, spill prevention and control, personnel training and compliance with other applicable requirements of this code;

2.2. demonstrates readiness to respond to a fuel spill and carry out appropriate mitigation measures, and

2.3. describes the process to dispose properly of contaminated materials.

The plan shall be made available to the *fire code official* at the time of the vehicle registration with the *fire code official*. The plan shall be maintained and updated by the operator as needed and made available to the *fire code official* upon request.

3. Persons responsible for dispensing operations shall be trained in the appropriate mitigating actions in the event of a fire, leak or spill. Training records shall be maintained by the fuel dispensing company.

4. Dispensing shall be conducted using Safety cans shall be listed in accordance with UL 30 and a maximum capacity of 5 gallons are used in dispensing operations.

5. Fuel dispensing shall not take place within 15 feet (4572 mm) of buildings or storm drains.

Exceptions:

1. The distance to storm drains shall not apply where an approved storm drain cover or an approved equivalent that will prevent any fuel from reaching the drain is in place prior to fueling. Where placement of a storm drain cover will cause the accumulation of excessive water or difficulty in conducting the fueling, such cover shall not be used and the fueling shall not take place within 15 feet (4572 mm) of a drain.

2. The distance to storm drains shall not apply for drains that direct influent to approved oil receptors.

6. Mobile fuel delivery to vehicles located inside or on the roof level of parking structures or other buildings is prohibited.

Exception: When approved by the fire code official, mobile fuel delivery to vehicles located on the roof level of parking structures or other buildings may be allowed where there is exterior vehicular access from grade level.

7. Fuel deliver vehicle brakes shall be set and hazard lights shall be activated during dispensing operations.

8. The engines of the vehicles being fueled shall be shut off during dispensing operations.

9. Fuel dispensing shall be prohibited within 25 feet (7620 mm) of sources of ignition, including electrical, in accordance with 5003.7. Signs prohibiting smoking or open flames within 25 feet (7620 mm) of the service vehicle or the point of fueling shall be prominently

posted on not less than three sides of the vehicle including the back and both sides. The engines of vehicles being fueled shall be shut off during dispensing operations.

10. Nighttime fueling operations shall only take place in adequately lighted areas.

11. Operators of *fuel delivery vehicles* shall have in their possession at all times an emergency communication device to notify the proper authorities in the event of an emergency.

12. At least one portable fire extinguisher with a minimum rating of 40:BC shall be provided on the fuel delivery vehicle with signage clearly indicating its location.

13. Absorbent materials, nonwater-absorbent pads, an approved container with lid and a nonmetallic shovel shall be provided on the fuel delivery vehicle to mitigate a minimum 5-gallon (19 L) fuel spill.

14. A means shall be provided to prevent liquids spilled during dispensing operations from flowing into buildings or off-site. Acceptable methods include, but shall not be limited to, drop pans, absorbent pads and other approved means.

15. Any unauthorized discharge of motor fuel shall comply with Section 5003.3.1.

16. Mobile fueling operations shall be limited to times when the public is not present within 15 feet (4572 mm) of dispensing operations.

Section 6103.2.1 is amended by adding a new Section 6103.2.1.8 to read as follows:

6103.2.1.8 Jewelry Repair, Dental Labs and Similar Occupancies. Where natural gas service is not available, portable LP-Gas containers are allowed to be used to supply approved torch assemblies or similar appliances. Such containers shall not exceed 20- pound (9.0 kg) water capacity. Aggregate capacity shall not exceed 60-pound (27.2 kg) water capacity. Each device shall be separated from other containers by a distance of not less than 20 feet.

Section 6104.2 is amended by numbering the existing Exception as "1" and adding an Exception 2 to read as follows:

2. Except as permitted in Sections 308 and 6104.3.2, LP-gas containers are not permitted in residential areas.

Section 6104.3 is amended by adding a new Section 6104.3.2 to read as follows:

6104.3.3 Spas, Pool Heaters, and Other Listed Devices. Where natural gas service is not available, an LP-gas container is allowed to be used to supply spa and pool heaters or other listed devices. Such container shall not exceed 250-gallon water capacity per lot. See Table 6104.3 for location of containers.

Exception: Lots where LP-gas can be off-loaded wholly on the property where the tank is located may install up to 500 gallon above ground or 1,000 gallon underground approved containers.

Section 6107.4 is amended to read as follows:

6107.4 Protecting Containers from Vehicles. Where exposed to vehicular damage due to proximity to alleys, driveways or parking areas, LP-gas containers, regulators and piping shall be protected in accordance with Section 312.

Section 6109.13 is amended by deleting the "Exception."

Appendix M "High-Rise Buildings – Retroactive Automatic Sprinkler Requirement" of the Fire Code is adopted to read as follows:

APPENDIX M – HIGH-RISE BUILDINGS – RETROACTIVE AUTOMATIC SPRINKLER REQUIREMENT

M101.1 Scope. An automatic sprinkler system shall be installed in all existing high-rise buildings in accordance with the requirements and compliance schedule of this appendix.

M102.1 High-Rise buildings. An automatic sprinkler system shall be installed in accordance with Section 903.3.1.1 of the International Fire Code shall be provided throughout existing high-rise buildings.

Exceptions:

1. Airport traffic control towers
2. Open parking structures
3. Group U occupancies
4. Occupancies in Group F-2

M103.1 Compliance Schedule. Building owners shall file a compliance schedule with the fire code official not later than 365 days after the effective date of this code. The compliance schedule shall not exceed 12 years for an automatic sprinkler system retrofit.

SECTION 2. All provisions of the Ordinances of the City of Farmers Branch, Texas, in conflict with the provisions of this ordinance be, and the same are hereby, repealed, and all other provisions of the Ordinances of the City not in conflict with the provisions of this ordinance shall remain in full force and effect.

SECTION 3. An offense committed before the effective date of this ordinance is governed by prior law and the provisions of the Code of Ordinances, as amended, in effect when the offense was committed and the former law is continued in effect for this purpose.

SECTION 4. Should any word, sentence, paragraph, subdivision, clause, phrase or section of this ordinance, be adjudged or held to be void or unconstitutional, the same shall not affect the validity of the remaining portions of said ordinance, which shall remain in full force and effect.

SECTION 5. Any person violating any of the provisions or terms of this ordinance shall be subject to the same penalty as provided for in the Code of Ordinances of the City of Farmers Branch as heretofore amended and, upon conviction, shall be punished by a fine not to exceed the sum of Two Thousand Dollars ($2,000.00).

SECTION 6. This ordinance shall take effect on the first day of the calendar month following its passage in accordance with the provisions of the charter and state law.

DULY PASSED BY THE CITY COUNCIL OF THE CITY OF FARMERS BRANCH, TEXAS, ON THE 13th DAY OF DECEMBER, 2016.

ATTEST:

Amy Piukana, City Secretary

APPROVED:

Bob Phelps, Mayor

APPROVED AS TO FORM:

Peter G. Smith, City Attorney
(kbl:11/29/16:81771)